

***Eriophorum viridicarinatum* (Engelm.) Fern**

green keeled cotton-grass
Cyperaceae (Sedge Family)

Status: State Sensitive

Rank: G5S2

General Description: Adapted from Hitchcock et al.(1969):
Extensively colonial from creeping rhizomes. Culms subterete, 8 to 24 inches tall. Leaves basal and cauline, the blade well developed, more or less elongate (especially that of the lower leaves), 1/16 to 1/4 inch wide, flat or nearly so for most of its length, but becoming narrow and triangular or channeled toward the tip. Uppermost culm leaf with well-developed blade usually equaling or exceeding the sheath. Involucral bracts several, unequal, 2 or more of them evidently foliaceous at least above the broadened, more chartaceous base, the longest one generally surpassing (or at least equaling) the inflorescence. Spikelet 2-8, most or all of them individually pedunculate, in a compact to open, umbelliform cyme, the peduncles more or less strongly compressed, smooth or sometimes minutely scabrous-hirtellous. Scales blackish-green, with well-developed, notably paler midrib that tends to be expanded distally and reaches the tip of the scale. Anthers mostly 1/8 to 1/4 inch long (dry). Bristles numerous, white or nearly so. Achenes blackish, 1/16 inch long, broadly oblanceolate to obovate, 2-3 times as long as wide.

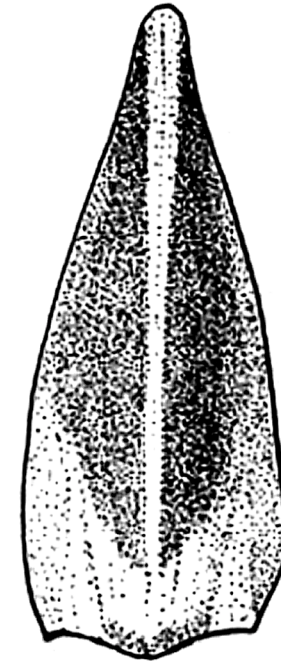
Identification Tips: *Eriophorum viridicarinatum* is very similar to *E. polystachion* except that *E. viridicarinatum* has consistently blackish-green scales with a well-developed, notably paler midrib that is expanded distally and reaches the tip of the scale. *E. polystachion* has tawny to brownish or blackish-green scales with a slender midrib that is very thin distally and does not reach the tip of the scale (Hitchcock et al. 1969).

Phenology: Flowers June through July.

Range: Occurs from Newfoundland to Alaska, south to New York, Michigan, Colorado, and northern Idaho. In Washington, the taxon is known from Ferry, Pend Oreille, Okanogan and Spokane counties in the Okanogan Highlands, Eastern Cascades, and Columbia Basin physiographic provinces..

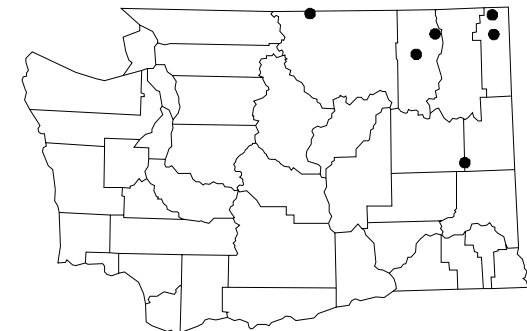
Eriophorum viridicarinatum

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Known distribution of
Eriophorum viridicarinatum
in Washington



● Current (1980+)
○ Historic (older than 1980)

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Photo by
Barb Benner - USFS

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Habitat: Cold, sometimes calcareous, swamps and bogs at moderate to high elevations (2000 to 6600 feet). In Washington, the species occurs in sedge dominated vegetation. Other species present include *Carex lasiocarpa*, *C. limosa*, *C. muricata*, *C. utriculata*, *C. brunnescens*, *Scirpus acutus*, *Potentilla palustris*, *Eleocharis palustris*, *Menyanthes trifoliata*, *Muhlenbergia glomerata*, *Equisetum fluviatile*, *Potamogeton natans*, *Eriophorum polystachion* and *Ledum groenlandicum*.

Ecology: This species is an obligate wetland species (USFWS 1988). As such, it is presumably dependent upon the maintenance of the hydrologic regime of the wetlands within which it is found.

State Status Comments: There are less than 10 occurrences in Washington.

Inventory Needs: Inventory of appropriate habitats is needed throughout Washington.

Threats and Management Concerns: Hydrologic alteration is the greatest threat to the species. Grazing may have a minimal impact at a few sites.

References:

Hitchcock, C. L., A. Cronquist, M. Ownbey, and J.W. Thompson. 1969. *Vascular Plants of the Pacific Northwest, Part 1: Vascular Cryptogams, Gymnosperms, and Monocotyledons*. University of Washington Press, Seattle. 914 pp.

U.S. Fish and Wildlife Service. 1988. National list of vascular plant species that occur in wetlands. USFWS Biological Report 88 (24).



Photo by
Robert Bursik - IDCDC